

## CAT -9 SELF- SETTING CEMENT

### DESCRIPTION

An intimate composite of uniquely developed and researched asbestos free inorganic mineral fibre combined with hydraulic cement and chemically inert fillers. CAT-9 cements combines with water to form a general purpose protective coating with self-setting properties as per IS9743 and BS3533.

CAT-9 cement is suitable for application on thermal insulation of various types and sets without application of heat to produce a hard surface layer resistant to weather impact and abrasion damage. CAT-9 self-setting cement conforms with BS 3958: part 6 or IS 5724-1970.

CAT-9 self-setting cement fulfills a vital function in the total insulation system by protecting both the integrity and thermal efficiency of basic insulant.

Application includes steam turbines, vessels tanks, pipe works, chemical process plants, gas ducts etc. it is non-combustible as per BS 476 part 4 and therefore suitable for surfacing light weight fire protection media applied on structural steelworks.

### MIXING AND APPLICATIONS

CAT-9 is normally mixed in a ratio of 4 parts of cement by weight to 3 part by weight of water. Actual proportion may vary with substrate. The mix material should be used within 2 hours. Unused material should not be used with a fresh batch. CAT-9 is suitable for application by conventional trowelling methods.

Where additional mechanical strength is needed, the cement may be applied over wirenetting, or expanded metal. Any pins or clips used to secure such reinforcement to the equipment should be turned down into close contact with the surface of insulation before the application of the cement.

### PHYSICAL PROPERTIES :

**Applied density :** 1200 to 1250 kg/m<sup>3</sup>

**Box density :** 750 to 800 kg/m<sup>3</sup>

**Wet covering capacity :** Approx 62m<sup>2</sup> per m.t  
12mm thickness, 125m<sup>2</sup> per mt at 6mm thickness.

**Resistance to impact :** 20-24 mm

**Resistance to Compression :** 4500-5000 KN/m<sup>2</sup>

**Flexural strength :** 2800-3100 KN/m<sup>2</sup>

**shrinkage :** 0.18% maximum

**Initial Set ( setting time )** Within 24 hours

**Final Set :** 20-25 days after laying

**Drying time:** 48 hrs under normal conditions upto 72hrs under cold humid conditions.

**Temperature limit :** 700° C for continuous service conditions.

### EXPANSION JOINTS

Expansion joints are desirable where the cement is subject to the effects of appreciable expansion and contraction of the underlying surface, so as to limit the size of each independent panel to approximately 2m x 2m.

### STORAGE

CAT - 9 cement should always be stored under dry conditions.

### PACKING

50 kg polythene lined Hessian Bags.